

DAC NOMENCLATURE:  
Douglas #1

UNOCAL

UNOCAL CHEMICALS DIVISION  
PETROCHEMICALS GROUP

REC'D DEC 17 1987

Product Name: SPECIAL TEXTILE  
Product Code No: 11076

Page 1 of 5  
Issue Date: 6/29/87

MANUFACTURER:

UNOCAL CHEMICALS DIVISION  
UNION OIL COMPANY OF CALIFORNIA  
1345 N. MEACHAM  
SCHAUMBURG, ILLINOIS 60196

CONTACT FOR FURTHER INFORMATION:  
MSDS COORDINATOR (312) 490-2500

Transportation Emergencies:

Call CHEMTREC  
(800) 424-9300 Cont. U.S.  
(202) 483-7616 (Collect)  
from Alaska & Hawaii

Health Emergencies:  
CALL LOS ANGELES POISON  
INFORMATION CENTER (24 hrs.)  
(213) 664-2121

PRODUCT IDENTIFICATION

PRODUCT NAME: SPECIAL TEXTILE

SYNONYMS: AMSCO SOLV 1076

GENERIC NAME: VOLATILE SOLVENT

CHEMICAL FAMILY: AROMATIC HYDROCARBON MIXTURE

DOT PROPER SHIPPING NAME: PETROLEUM NAPHTHA

ID NUMBER: UN1255

DOT HAZARD CLASSIFICATION: FLAMMABLE LIQUID

SECTION I - HAZARDOUS INGREDIENTS/EXPOSURE LIMITS

TLV UNITS AGENCY TYPE

N-HEXANE	110-54-3	50.0000 PPM 500.0000 PPM	ACGIH OSHA	TWA TWA
CYCLOHEXANE	110-82-7	300.0000 PPM 375.0000 PPM 300.0000 PPM	ACGIH ACGIH OSHA	TWA STEL TWA
N-HEPTANE	142-82-5	400.0000 PPM 500.0000 PPM 500.0000 PPM	ACGIH ACGIH OSHA	TWA STEL TWA
METHYLCYCLOHEXANE	108-87-2	400.0000 PPM 500.0000 PPM 500.0000 PPM	ACGIH ACGIH OSHA	TWA STEL TWA
TOLUENE	108-88-3	100.0000 PPM 150.0000 PPM 200.0000 PPM 300.0000 PPM 500.0000 PPM 200.0000 PPM	ACGIH ACGIH OSHA OSHA OSHA CAL OSHA	TWA STEL TWA CEIL EXCUR EXCUR
C6-C8 PARAFFINS		NOT ESTABLISHED		

\*\*\* INGREDIENTS CONTINUED ON NEXT PAGE \*\*\*

SECTION I - HAZARDOUS INGREDIENTS/EXPOSURE LIMITS

TLV UNITS AGENCY TYPE

C6-C8 CYCLOPARAFFINS

NOT ESTABLISHED

SECTION II - EMERGENCY AND FIRST AID PROCEDURES

\*\*\*EMERGENCY\*\*\*

Have physician call LOS ANGELES POISON  
INFORMATION CENTER (24 hrs.) (213) 664-2121

EYE CONTACT:

MOVE VICTIM AWAY FROM EXPOSURE TO VAPORS AND INTO FRESH AIR. IF IRRITATION OR REDNESS DEVELOPS, SEEK MEDICAL ATTENTION. FOR DIRECT CONTACT, FLUSH THE AFFECTED EYE(S) WITH CLEAN WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING. CLEANSE AFFECTED AREA(S) THOROUGHLY BY WASHING WITH MILD SOAP AND WATER. IF IRRITATION OR REDNESS DEVELOPS AND PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION (BREATHING):

IF SYMPTOMS OF EXPOSURE DEVELOP (SEE SECTION III), MOVE VICTIM AWAY FROM SOURCE OF EXPOSURE AND INTO FRESH AIR. IF SYMPTOMS PERSIST, SEEK IMMEDIATE MEDICAL ATTENTION. IF VICTIM IS NOT BREATHING, ARTIFICIAL RESPIRATION SHOULD BE ADMINISTERED. IF BREATHING DIFFICULTIES DEVELOP, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. SEEK IMMEDIATE MEDICAL ATTENTION.

INGESTION (SWALLOWING):

\*\*\*SEEK EMERGENCY MEDICAL ATTENTION.\*\*\* THIS MATERIAL IS SLIGHTLY TOXIC BY INGESTION AND AN ASPIRATION HAZARD. IF VICTIM IS DROWSY OR UNCONSCIOUS, PLACE ON THE LEFT SIDE WITH THE HEAD DOWN. DO NOT GIVE ANYTHING BY MOUTH. IF VICTIM IS CONSCIOUS AND ALERT, VOMITING SHOULD BE INDUCED FOR INGESTIONS OF LARGE AMOUNTS (MORE THAN 5 OUNCES IN AN ADULT) PREFERABLY WITH SYRUP OF IPECAC UNDER DIRECTION FROM A PHYSICIAN OR POISON CENTER. IF SYRUP OF IPECAC IS NOT AVAILABLE, VOMITING CAN BE INDUCED BY GENTLY PLACING 2 FINGERS IN THE BACK OF THE THROAT. IF POSSIBLE, DO NOT LEAVE VICTIM UNATTENDED.

COMMENTS:

NOTE TO PHYSICIANS: EPINEPHRINE AND OTHER SYMPATHOMIMETIC DRUGS MAY POTENTIATE CARDIAC ARRHYTHMIAS IN PERSONS EXPOSED TO THIS CHEMICAL. THESE DRUGS SHOULD BE USED CAUTIOUSLY, IF AT ALL, AND ONLY WITH CARDIAC MONITORING

SECTION III - HEALTH HAZARDS/ROUTES OF ENTRY

EYE CONTACT:

THIS MATERIAL IS AN EYE IRRITANT. DIRECT CONTACT WITH THE LIQUID OR EXPOSURE TO ITS VAPORS OR MISTS MAY CAUSE BURNING, TEARING, REDNESS AND SWELLING.

SKIN CONTACT:

THIS MATERIAL MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE TO THIS MATERIAL MAY CAUSE REDNESS, BURNING, AND DRYING AND CRACKING OF THE SKIN. PERSONS WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS MATERIAL.

### SECTION III - HEALTH HAZARDS/ROUTES OF ENTRY

#### INHALATION (BREATHING):

WHILE THIS MATERIAL HAS A LOW DEGREE OF TOXICITY, BREATHING HIGH CONCENTRATIONS OF VAPORS OR MISTS MAY CAUSE: IRRITATION OF THE NOSE AND THROAT. SIGNS OF NERVOUS SYSTEM DEPRESSION (E.G., DROWSINESS, DIZZINESS, LOSS OF COORDINATION, AND FATIGUE). IRREGULAR HEARTBEATS (ARRHYTHMIAS). PROLONGED OR REPEATED EXPOSURE TO VAPORS OR MISTS MAY CAUSE: VISUAL DISTURBANCES. DAMAGE TO PERIPHERAL NERVES. RESPIRATORY SYMPTOMS ASSOCIATED WITH PRE-EXISTING LUNG DISORDERS ( E.G., ASTHMA-LIKE CONDITIONS) MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

#### INGESTION (SWALLOWING):

INGESTION OF EXCESSIVE QUANTITIES MAY CAUSE: IRRITATION OF THE DIGESTIVE TRACT. SIGNS OF NERVOUS SYSTEM DEPRESSION (E.G., DROWSINESS, DIZZINESS, LOSS OF COORDINATION, AND FATIGUE). ASPIRATION HAZARD - THIS MATERIAL CAN ENTER LUNGS DURING SWALLOWING OR VOMITING AND CAUSE LUNG INFLAMMATION AND DAMAGE.

#### COMMENTS:

THIS SUBSTANCE HAS NOT BEEN IDENTIFIED AS A CARCINOGEN OR PROBABLE CARCINOGEN BY NTP, IARC OR OSHA.  
RESULTS OF TESTS IN WORKERS EXPOSED TO HIGH CONCENTRATIONS HAVE SHOWN THAT A COMPONENT OF THIS PRODUCT CAN CAUSE IRREVERSIBLE CHANGES IN THE GENETIC MATERIAL (DNA) OF A CELL. THE HUMAN HEALTH CONSEQUENCE OF THESE CHANGES IS NOT FULLY UNDERSTOOD.  
INTENTIONAL MISUSE BY DELIBERATE INHALATION OF TOLUENE HAS BEEN SHOWN TO CAUSE LIVER, KIDNEY AND BRAIN DAMAGE.  
PRE-EXISTING HEART DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.  
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE (SOMETIMES REFERRED TO AS SOLVENT OR PAINTERS' SYNDROME).  
INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THIS PRODUCT MAY BE HARMFUL OR FATAL.

### SECTION IV - SPECIAL PROTECTION INFORMATION

#### VENTILATION:

IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE ESTABLISHED EXPOSURE LIMITS (SEE SECTION I), ADDITIONAL VENTILATION OR EXHAUST SYSTEMS MAY BE REQUIRED. WHERE EXPLOSIVE MIXTURES MAY BE PRESENT, SYSTEMS SAFE FOR SUCH LOCATIONS SHOULD BE USED.

#### RESPIRATORY PROTECTION:

THE USE OF RESPIRATORY PROTECTION IS ADVISED WHEN CONCENTRATIONS EXCEED THE ESTABLISHED EXPOSURE LIMITS (SEE SECTION I). DEPENDING ON THE AIRBORNE CONCENTRATION, USE A RESPIRATOR OR GAS MASK WITH APPROPRIATE CARTRIDGES AND CANNISTERS (NIOSH APPROVED, IF AVAILABLE) OR SUPPLIED AIR EQUIPMENT.

#### PROTECTIVE GLOVES:

THE USE OF GLOVES IMPERMEABLE TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT AND POSSIBLE IRRITATION.

#### EYE PROTECTION:

APPROVED EYE PROTECTION TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY IS RECOMMENDED.

#### OTHER PROTECTIVE EQUIPMENT:

IT IS SUGGESTED THAT A SOURCE OF CLEAN WATER BE AVAILABLE IN WORK AREA FOR FLUSHING EYES AND SKIN. IMPERVIOUS CLOTHING SHOULD BE WORN AS NEEDED.

## SECTION V - REACTIVITY DATA

### STABILITY:

STABLE

### INCOMPATIBILITY (MATERIALS TO AVOID):

THIS PRODUCT IS INCOMPATIBLE WITH STRONG ACIDS OR BASES, OXIDIZING AGENTS AND SELECTED AMINES.

### HAZARDOUS DECOMPOSITION PRODUCTS:

THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE.

### HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

## SECTION VI - SPILL OR LEAK PROCEDURES

\*\*\*HIGHWAY OR RAILWAY SPILLS\*\*\*  
Call CHEMTREC (800) 424-9300 Cont. U.S.  
(Collect) (202) 483-7616 from Alaska & Hawaii

### PRECAUTIONS IN CASE OF RELEASE OR SPILL:

STAY UPWIND AND AWAY FROM SPILL. KEEP ALL SOURCES OF IGNITION AND HOT METAL SURFACES AWAY FROM SPILL. IF SPILL IS INDOORS, VENTILATE AREA OF SPILL. A UNIVERSAL TYPE FOAM MAY BE USED TO SUPPRESS VAPORS. KEEP OUT OF DRAINS, SEWERS OR WATERWAYS. USE SAND OR OTHER INERT MATERIAL TO DAM AND CONTAIN SPILL. DO NOT FLUSH AREA WITH WATER. FOR SMALL SPILLS, DO NOT FLUSH WITH WATER; USE ABSORBANT PADS. CALL SPILL RESPONSE TEAM IF LARGE SPILL. NOTIFY APPROPRIATE STATE/LOCAL AGENCIES.

### WASTE DISPOSAL METHOD:

DISPOSE OF PRODUCT IN ACCORDANCE WITH LOCAL, COUNTY, STATE, AND FEDERAL REGULATIONS.

## SECTION VII - STORAGE AND SPECIAL PRECAUTIONS

### HANDLING AND STORAGE PRECAUTIONS:

KEEP CONTAINERS TIGHTLY CLOSED. KEEP CONTAINERS COOL, DRY, AND AWAY FROM SOURCES OF IGNITION. USE AND STORE THIS PRODUCT WITH ADEQUATE VENTILATION. AVOID INHALATION OF VAPORS AND PERSONAL CONTACT WITH THE PRODUCT. USE GOOD PERSONAL HYGIENE PRACTICE. "EMPTY" CONTAINERS RETAIN RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. "EMPTY" DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY SHIPPED TO THE SUPPLIER OR A DRUM RECONDITIONER. ALL OTHER CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS. BEFORE WORKING ON OR IN TANKS WHICH CONTAIN OR HAVE CONTAINED THIS PRODUCT, REFER TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ANSI Z49.1, AND OTHER GOVERNMENTAL AND INDUSTRIAL REFERENCES PERTAINING TO CLEANING, REPAIRING, WELDING, OR OTHER CONTEMPLATED OPERATIONS.

## SECTION VIII - FIRE AND EXPLOSION HAZARD DATA

NFPA HAZARD CLASS	HEALTH HAZARD: 2 FLAMMABILITY: 3 REACTIVITY: 0 OTHER: -	HAZARD RANKING		FLASH POINT
		0 = LEAST		
		1 = SLIGHT		
		2 = MODERATE		
		3 = HIGH		
		4 = EXTREME		<10, TCC F

### LOWER EXPLOSIVE LIMIT (% VOL.)

1.0

### UPPER EXPLOSIVE LIMIT (% VOL.)

7.0

SECTION VIII - FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA:

EXTINGUISH WITH DRY CHEMICAL, CO2 OR A UNIVERSAL TYPE FOAM.

FIRE & EXPLOSION HAZARDS:

FLASHBACK ALONG VAPOR TRAIL MAY OCCUR. THIS MATERIAL IS EXTREMELY FLAMMABLE AND MAY BE IGNITED BY HEAT, SPARKS, FLAME OR STATIC ELECTRICITY.

FIRE FIGHTING PROCEDURES:

THE USE OF A SCBA IS RECOMMENDED FOR FIRE FIGHTERS. WATER SPRAY MAY BE USEFUL IN MINIMIZING VAPORS AND COOLING CONTAINERS EXPOSED TO HEAT AND FLAME. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

SECTION IX - PHYSICAL DATA

<u>APPROX. BOILING POINT</u>	<u>VAPOR DENSITY (AIR = 1)</u>	<u>VAPOR PRESSURE</u>
148 TO 225 F	3.3	106 MM HG @ 20C
<u>EVAPORATION RATE (N-BUTYL ACETATE = 1)</u>	<u>% VOLATILE</u>	<u>% SOLUBILITY IN WATER</u>
5.10	100%	NEGLIGIBLE (< 5%)
<u>SPECIFIC GRAVITY (TEMP/TEMP)</u>	<u>APPEARANCE</u>	<u>ODOR</u>
0.732 (60F/60F)	CLEAR, LITTLE COLOR IF ANY	CHARACTERISTIC

SECTION XI - DOCUMENTARY INFORMATION

ISSUE DATE: 6/29/87      PRODUCT CODE NO. 11076  
PREV. DATE: 4/20/87      PREV. PROD. CODE NO. 1076  
MSDS NO: 6307      PREV. MSDS NO: 799

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information in this document is believed to be correct as of the date issued. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.